

## ABSTRACT

A method for improving thermostability of proteins, proteins having improved thermostability, nucleic acids encoding the protein and host cells producing the proteins having improved thermostability are provided herein. The method entails comparing amino acid sequences of proteins derived from two or more species, estimating an amino acid sequence of an ancestral protein corresponding to the proteins, and replacing one or more amino acid residues that are different from those of the ancestral protein with the same amino acid residues present in the ancestral protein at those positions.